**Reading List**

Human Centered Design

The following materials come from different organizations, including the Stanford d.school and design consultancy IDEO. You may notice that different designers speak about the design process in slightly different ways. For example, IDEO describes the design process in three steps, while the d.school divides it into seven. As we discussed during the HCD Fundamentals workshop, design groups may use different steps or diagrams to describe their process, but the ethos of their work is the same— they start with understanding people’s core needs and ground the design process around those core needs so that what is ultimately designed (whether a product, process, or service) is what people have asked for— rather than *what we think* they need.

1. **What is human-centered design?**

IDEO.org’s two-minute video introduction to HCD/design thinking:

<http://www.designkit.org/human-centered-design>

1. **What’s the design thinking mindset? - Liberatory Design Cards**

The Liberatory Design Cards offer an introduction to the process, mindsets, and activities that build on the tradition of Human Centered Design (aka design thinking). Focus on the first 36 cards – “Liberatory Design Process” and “Liberatory Design Mindsets”. Of course, you can look at all the cards if you’d like!

<https://dschool.stanford.edu/resources/liberatory-design-cards>

1. **The Design Thinking Bootleg** is a set of tools and methods created by the Stanford d.school that you can use for inspiration. It lightly covers the phases of the design process and it provides prompts for inspiration and divergent thinking! <https://dschool.stanford.edu/resources/design-thinking-bootleg>
2. **Think Government Can’t Do Anything Quickly and Cheaply? Think Again.**

Looking to build a “test, learn and adapt” culture, federal agencies have conducted dozens of rapid, low-cost experiments over the last few years.

<https://www.govexec.com/management/2019/06/think-government-cant-do-anything-quickly-and-cheaply-think-again/157765/>

What is Problem Framing?

**Are You Solving the Right Problems?** *By Thomas Wedell-Wedellsborg*

In surveys of 106 C-suite executives representing 91 private- and public-sector companies from 17 countries, the author found that a full 85% agreed that their organizations were bad at problem diagnosis, and 87% agreed that this flaw carried significant costs. What they struggle with, it turns out, is not solving problems but figuring out what the problems are. And creative solutions nearly always come from an alternative explanation for—or a reframing of—your problem.

*The point of reframing is not to find the “real” problem but, rather, to see if there is a better problem to solve.* The author outlines seven practices for effective reframing. See below the link to the article:

<https://hbr.org/2017/01/are-you-solving-the-right-problems>

What is Discovery Research?

The Lab at OPM created two guidebooks about the Discovery Research process. The first, the **HCD Discovery Phase Concept Guide**, explains *why* designers do discovery research. See below the link to this first guide.

<https://github.com/labopm/HCD-Guides/blob/master/01-Discovery%20Stage%20Concept%20Guide.pdf>

The second, the **HCD Discovery Phase Operations Guide**, explains *how* designers conduct this research. See below the link to this second guide.

<https://github.com/labopm/HCD-Guides/blob/master/02-Discovery%20Stage%20Operations%20Guide.pdf>

What is Ideation?

The Lab at OPM has created a guidebook, The **Design Phase Operations Guide**, which explains how to enact the envision, prototype, and testing steps of HCD. Ideation happens at the stage of the process when you have made sense of your discovery research and identified areas for transformation. We say *transformation* instead of *improvement* because design is not simply the work of creating something new or improving something existing. Design can also be the work of enhancing and expanding something positive — or fortifying something that is critically important but tenuous — or pruning something back so as to return it to its most promising and true intention. Ideation is the moment in the project when you open your mind, think expansively, and imagine all the ways you can bring your transformation idea to life.

Refer to pages 20-25 of the **Design Phase Operations Guide** (see link below) as they explain ideation.

<https://github.com/labopm/HCD-Guides/blob/master/04-HCD%20Design%20Stage%20Operations%20Guide.pdf>

What is Prototyping?

**Stage Four in the Design Thinking Process: Prototype**

Descriptions of some of the nuts and bolts of prototyping:

<https://www.interaction-design.org/literature/article/stage-4-in-the-design-thinking-process-prototype>

**Prototyping for Social Impact,** Q&A with Nathalie Collins, Senior Design Lead at IDEO.org:

<https://www.plusacumen.org/journal/prototyping-social-impact>

**Prototyping Dashboard**

<https://dschool.stanford.edu/resources/prototyping-dashboard>

**Design Thinking: Get Started with Prototyping**

by [Rikke Friis Dam](https://www.interaction-design.org/literature/author/rikke-1) and [Yu Siang Teo](https://www.interaction-design.org/literature/author/teo)

Prototyping is an integral part of Design Thinking and User Experience design in general because it allows us to test our ideas quickly and improve on them in an equally timely fashion. The Institute of Design at Stanford (d.school) encourages a “bias towards action, where building and testing is valued over thinking and meeting. However, why is prototyping so important in the design process? Moreover, how does it help you create human-centered design solutions? Before we start making prototypes to test our assumptions, let’s get a closer understanding behind the what, how and why of prototyping.

<https://www.interaction-design.org/literature/article/design-thinking-get-started-with-prototyping>

What is Usability Testing?

The Lab at OPM has created a guidebook, The Design Phase Operations Guide, (see link below) that explains how to enact the envision, prototype, and testing steps of Human Centered Design. Refer to pages 58-69 as they explain usability testing.

<https://github.com/labopm/HCD-Guides/blob/master/04-HCD%20Design%20Stage%20Operations%20Guide.pdf>

Paperwork Reduction Act Guidance

The Paperwork Reduction Act (PRA) is a law governing how federal agencies collect information from the public. There is an excellent guide on how this law may or may not apply to HCD research on [digital.gov](https://pra.digital.gov/).